

*Prospectus*

# Umbrella Mitigation Bank

James City County, Virginia

Prepared for:

*James City County*

*Department of Development Management*

*Environmental Division*

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**1.0 Introduction:** James City County, Virginia (JCC, or “the County”) proposes to sponsor and establish the James City County Umbrella Mitigation Bank (“Bank”, or JCCUMB) in James City County, Virginia to provide effective compensation, either off-site or on-site, for unavoidable wetland and environmental impacts resulting from development projects within the proposed bank’s primary Geographic Service Area (GSA). Situated in the lower Coastal Plain of Virginia, James City County covers a 143-mi<sup>2</sup> area along the peninsula formed by the York River to the north and the James River to the south (Figure 1). Thus, the primary GSA will include Hydrologic Unit Codes (HUCs) from both the James River and York River watersheds. Specific HUCs within the primary GSA are discussed in Section 7.0.

James City County seeks to develop the Umbrella Mitigation Bank to further its watershed protection and restoration program. James City County has adopted watershed protection policies pursuant to its 1997 Comprehensive Plan. Strategy 9 of the Environmental Section of the Plan focuses on measures to protect surface water quality and quantity in the County. Since adoption of the Comprehensive Plan the County has embarked on a watershed evaluation, protection and restoration program designed to protect the County’s surface water resources and the habitats associated with them. The program was initiated with the development of the Powhatan Creek Watershed Plan in 2001; the Yarmouth Creek Watershed Plan in 2003; and a draft plan for Skiffes Creek (Skiffes Creek Baseline Assessment and Conservation Area Plan, 2004) which, among other things, identified stream segments that have been adversely affected by development. The Watershed Plans recommend a number of specific watershed protection measures. Using these plans, the County has identified a number of potential stream restoration projects in the Yarmouth and Powhatan watersheds, a few of which are currently under design. The continuation of this program will depend on the County’s ability to fund additional watershed assessments, identifying additional aquatic resource restoration and water quality improvement projects. Accordingly, the County desires to create a funding mechanism for the support of this program through the sale of mitigation credits to non-County entities as well as create credits to compensate for unavoidable impacts from County capital and infrastructure maintenance and improvement projects.

Based on the foregoing, the goals of the County are to (1) streamline the Section 404/401 permit evaluation process for proposed County improvement projects by providing more effective and consistent mitigation prior to authorized impacts to wetlands, streams, water resource buffers and other aquatic resources within the Bank Service Area; (2) provide a basis for funding support for watershed restoration and water quality improvement projects undertaken by the County and related political subdivisions through the sale of mitigation credits to non-County entities from the Umbrella Mitigation Bank; and (3) foster a comprehensive approach to meeting the long term watershed planning initiatives of the County.

**2.0 Umbrella Mitigation Banking Instrument (UMBI):** James City County proposes an Umbrella Mitigation Bank for administering and tracking mitigation projects being conducted by the County. The banking instrument and the development and operation of the bank will be in accordance with the Code of VA Sect. 33.1-223.2.1 Wetland Banking and the “Federal Guidance for the Establish, Use and Operation of Mitigation Banks”, published in Volume 60, Number 228 of the Federal Register, November 28, 1995, referred to hereafter as Federal Banking Guidance. The County’s responsibilities under the JCCUMB program will be administered by the Environmental Division of the Department of Development Management.

James City County proposes to restore, enhance, create, and/or preserve riparian systems, streams and wetlands for the purpose of generating compensation credits. In addition, water quality enhancement projects, such as Low Impact Development (LID) techniques, Best Management Practice (BMP) upgrades and Integrated Management Practice (IMP) measures, may be proposed

individually or in concert with restoration projects for which additional compensation credits would be requested from the MBRT. Once implemented, JCC will provide for the long-term preservation and management of the project areas included in the JCCUMB.

The Bank will be used primarily for compensatory mitigation for unavoidable impacts to wetlands and waters of the United States, including wetlands and streams in James City County and other geographic areas within the primary GSA, which result from activities authorized under Sections 404 and 401 of the Clean Water Act, and/or Section 10 of the Rivers and Harbors Act and the Virginia Water Control Law, provided such use has complied with all applicable requirements and is authorized by the appropriate authority.

The County acknowledges that wetland and stream mitigation sequencing as indicated in the Virginia Administrative Code under 9VAC25-210-115, Evaluation of Mitigation Alternatives, and EPA's Section 404 (b) (1) Guidelines shall be utilized by any applicant to the bank (i.e. avoidance, minimization and restoration) to the maximum extent practical in its planning, design and construction programs.

**3.0 Individual Site Development Plans:** The Umbrella Mitigation Banking Instrument will be designed to provide the basic framework for the County's mitigation banking program. A site-specific Site Development Plan (SDP) will be submitted to the MBRT for review and approval for each Bank Site proposed as part of the JCC Umbrella Mitigation Bank.

A SDP will be developed and sponsored by the County for each individual mitigation bank site. The Site Development Plan will include location maps, goals and objectives of the site, land use plans for the property, proposed geographic service area for the bank site, credit composition, site protection mechanism, banking master plan, bank phasing plans, the size (acres and/or linear footage) of wetlands, streams, or other aquatic resources proposed for inclusion at the site, hydrologic analysis and performance models, mitigation design plans, preliminary specifications and construction methodologies for the project development, bank success criteria, maintenance and monitoring plan and financial assurances. The MBRT will review and comment on all submittals within 60 days of receipt of such submittal.

In the event the SDP is not approved, the MBRT will provide JCC with specific reasons or rationale for not approving the submittal. Subsequently, JCC may resubmit a revised SDP with specific modification or justification that addresses the MBRT concerns. In the event of approval, the SDP for the Bank Site will be attached as an Addendum to the UMBI, and the Bank Site will be deemed a portion of the Bank. Credits will be released consistent with the schedule of credit availability negotiated in the SDP. Due to fluctuations in credit demand, an approved Bank Site or an approved phase of a Bank Site may be left undeveloped if no pre-sale or other credits have been debited from the site. The County may not elect to delay or forego the construction of a proposed phase if there will be a negative impact on prior-constructed phases of the Bank Site. The County must provide written notice to the MBRT when proposing to withdraw from the UMB either entire Bank Sites or approved phases of Bank Sites from which credits have not been debited. Such a withdrawal must be approved by the MBRT.

In developing the Site Development Plan for a proposed Bank Site, JCC will provide the information described in the following sections.

**4.0 Project Description:** The SDP for each Bank Site proposed for inclusion in UMB will include a description of project location, waterway/watershed, and goals and objectives. The focus of the Umbrella Mitigation Bank, and thus each Bank Site, will be compensation for impacts to jurisdictional Waters and Wetlands of the United States. The goals and objectives of

each SDP will be to restore important ecological functions and related habitat values of wetland and stream systems, riparian areas, and other aquatic resources. Improved water quality within the drainage basin will be brought about by the preservation, enhancement, restoration and creation of wetlands, streams and forest buffers as well as other water quality enhancement methods, such as LID techniques, BMP upgrades and IMP measures.

**5.0 Baseline Conditions:** A SDP will include a description of existing conditions relevant to the development of the proposed Bank Site and the stated goals and objectives of the project. The physical setting of the Bank Site, such as the geomorphology, land use/land cover, hydrology, soils and vegetation, will be described, along with watershed size and characteristics. A description of baseline conditions will include an accounting of the type and extent of degraded ecological systems, such as the total acreage of various types of restorable wetlands, buffers and ecologically significant areas, or linear feet of stream reaches by stream type. Projects seeking water quality improvement credits through the implementation of LID techniques, BMP upgrades and IMP measures will describe the acreage of the proposed features and the watershed area to be treated.

**6.0 Location and Ownership of Parcels.** Under this proposal, the County will record a restrictive covenant or easement for each Bank Site added to the Umbrella Mitigation Bank by amendment. This covenant or easement may also be transferable to a bona fide conservation organization upon fulfillment of project objectives with Bank Site ownership remaining with the titled owner. The covenant or easement used to protect a mitigation bank site must be reviewed and approved by the UMBI agencies.

**7.0 Establishment of Credits:** The calculation of credits generated from individual Bank Sites will be established within the SDP for each individual Bank Site and approved by the MBRT. Each SDP will describe the types of mitigation activities (e.g., creation, restoration, enhancement, preservation, LID techniques, BMP upgrades, IMP measures) to be performed accompanied by the respective credit ratios approved by the MBRT. The mitigation types, respective credit ratios and the form of the credits will be in accordance with current guidance published by the Corps and DEQ.

**8.0 Disclaimer:** The UMBI will not in any manner supersede or alter the statutory authorities and responsibilities, regulations, policies, and guidance of the signatory agencies or any other agency.

**9.0 Geographic Service Area:** The primary geographic service area (GSA) for the JCCUMB will include all or a portion of the following cities and counties: Virginia Beach, Chesapeake, Norfolk, Portsmouth, Suffolk, Isle of Wight, Prince George, Charles City, New Kent, James City, York, Newport News, Hampton, Gloucester, King William, Hanover, Caroline, and King and Queen. These areas must be located within the Hydrologic Unit Codes (HUCs):

- 1) James River Watershed - 02080206 (Lower James), 02080208 (Hampton Roads); and,
- 2) York River Watershed - 02080107 (York), 02080106 (Pamunkey), 02080105 (Mattaponi).

Individual Bank Sites proposed as addenda to the Mitigation Banking Instrument will be designated as either within the James River or York River watersheds of the primary GSA. Credits will not be transferable between the two watersheds unless approved by the MBRT. Use of a Bank Site to compensate for impacts beyond the primary GSA may also be considered by the MBRT on a case-by-case basis. A specific geographic service area will be designated for each bank site. It is unlikely that a single bank site will serve both the York River and James River watersheds. A separate credit ledger will be maintained for each bank site.

**10.0 Sponsor's Obligations:** The County agrees to perform all necessary work, in accordance with the provisions of the UMBI and approved Site Development Plans, to establish and/or maintain the Bank Sites, until (1) credits have been exhausted or banking activity is voluntarily terminated through written notice by JCC with approval of the Corps and MBRT; and (2) it has been determined that the debited Bank Site has satisfied all the conditions herein and in the approved SDP.

**11.0 Permits:** The County will obtain all documentation, permits, and other authorizations required to establish and maintain the UMB and Bank Sites. The UMBI or SDP addenda will not comprise or substitute for such authorizations.

**12.0 Financial Assurance Requirements:** The County will provide financial assurance in a form and amount acceptable to the Corps and the MBRT for each Bank Site as part the individual SDP. The financial assurance will continue until the Bank credits have been exhausted and final monitoring has been completed, submitted, and approved by the MBRT.

**13.0 Real Estate Provisions:** The County will provide for the perpetual protection and preservation of each Bank Site through restrictive covenants or conservation easements. These provisions will conform to the current Norfolk District, U.S. Army Corps of Engineers guidance with the language modified on a case-by-case basis to allow for road easements, road/bridge crossings, horse paths, hike/bike trails, and other educational activities associated with public projects such as greenways. Each real estate instrument used must be approved by the MBRT.

**14.0 Phasing:** It is expected, though not required, that the Bank Sites, or portions thereof, may be developed in several phases, which will be set forth in the individual SDP. The scope and timing of each phase will be at the discretion of the County subject to MBRT approval. However, the area developed will not exceed the areas for which design has been approved by the MBRT, without risk to the County.

**15.0 Use of Credits:** The following types of projects may be eligible to use the Umbrella Mitigation Bank:

1. All activities regulated under Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act and/or the Virginia Water Protection Permit Regulations (9 VAC 25-210) located within the primary geographic service Area of this Umbrella Mitigation Bank may be eligible to use UMB as compensatory mitigation for unavoidable impacts;
2. Use of credits may only be authorized when adverse impacts are unavoidable; when onsite compensation is either not practicable or use of a Mitigation Bank is environmentally preferable to onsite compensation.
3. Credits may be used to compensate for environmental impacts under other programs (civil works, Superfund removal and remedial, supplemental environmental projects for state and Federal enforcement actions, etc.)
4. For projects in the primary GSA of this UMB that require authorization with a Nationwide Permit (NWP) under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act, Norfolk District State Program General Permit (SPGP), and/or a Virginia Water Protection Permit, and if said authorizations requires compensatory mitigation, credits from the JCCUMB may be permitted to be used to satisfy these compensatory mitigation requirements if the County and the third party permittee reach a mutually acceptable financial agreement and subject to regulatory approval on a case by case basis.
5. For projects in the primary GSA of the JCCUMB that require authorization with an Individual Permit (IP) under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and

Harbors Act and/or Virginia Water Protection Permit, the Corps and DEQ, in consultation with the other regulatory and resource agencies, will determine the eligibility of such projects to use the UMB on a case-by-case basis. Once the Corps and/or DEQ have determined that mitigation in the JCCUMB is ecologically preferable to any on-site alternatives or that there are no practicable on-site alternatives, mitigation may be provided by the use of mitigation credits from the UMB as determined by the Corps and/or DEQ for each agency's respective permits if the County and the third party permittee reach a mutually acceptable financial agreement.

**16.0 Decision-Making Authority for Use of the Bank:** The Corps is responsible for making permit decisions pursuant to Section 10 of the River and Harbors Act and Section 404 of the Clean Water Act, including determinations of compliance with the Corps permit regulations (33 CFR Parts 320-330) and Section 404 (b) (1) Guidelines (40 CFR Part 230). The VDEQ has regulatory authority for wetlands and streams through Section 401 of the Clean Water Act and the State Water Control Law. The Corps and VDEQ will determine the amount of compensatory mitigation required for each permit, and the equivalent number of credits necessary to meet mitigation requirements and whether any Site Bank implemented pursuant to the UMBI is acceptable for use. To the extent that the UMB may be authorized for use under other Federal, State, or local programs, the Corps and VDEQ, in consultation with the affected regulatory entity, will determine the eligibility of projects to use the UMB on a case-by-case basis.

**19.0 Crediting/Debiting and Accounting Procedures:** The County will be responsible for accounting for credits and debits in the Umbrella Mitigation Bank. The County will use a separate ledger for each mitigation bank site. The accounting ledger shall be developed in consultation with the MBRT. The County and MBRT will follow the guidelines established by the Corps in the Federal Banking Guidance for accounting procedures.

Each credit for compensatory wetland mitigation will be comprised of acreage consistent with the terms of the UMBI or SDP addenda. Each credit for stream mitigation will be comprised of linear feet consistent with the terms of the UMBI or SDP addenda, unless modified in future guidelines established through mitigation guidance documents prepared by the permitting agencies. Areas that are available for stream restoration crediting will be considered separately from the area available for wetlands mitigation crediting. Applicants may purchase credits from the UMB, or the County or other designated government entity may withdrawal credits from the UMB, to compensate for unavoidable wetland or stream impacts caused by projects authorized by the VDEQ and/or the Norfolk District, U. S. Army Corps of Engineers when the permitting agency determines that compensatory mitigation is necessary or appropriate and that the JCCUMB is appropriate for use.

**20.0 Maintenance Provisions:** The County agrees to perform all necessary work to maintain each Site Bank consistent with the maintenance criteria established in the respective site-specific SDP.

**21.0 Monitoring Reports:** The County will submit to each member of the MBRT an annual report describing the condition of each Site Bank in relation to the success criteria outlined in the site-specific SDP, as well as relating the overall activity of the Umbrella Mitigation Bank.

**22.0 Remedial Actions:** In the event the Site Bank or a specific phase of a Site Bank fails to achieve the success criteria specified in the site-specific SDP, the County will develop necessary adaptive management plans and/or implement appropriate remedial actions for the Site Bank for that phase in coordination with the MBRT.

**James City County Umbrella Mitigation Bank**  
**Addendum 1: Middle Powhatan Creek Mitigation Bank**  
**Powhatan Plantation Stream Restoration**  
**Prospectus and Concept Plan**

**James City County, Virginia**  
**James River Watershed**

**Introduction**

As part of the James City County Umbrella Mitigation Bank (JCCUMB), James City County (JCC or “the County”) proposes to sponsor and establish the Middle Powhatan Creek Mitigation Bank Site (“the Bank Site”) in James City County, Virginia. The proposed Bank Site would provide effective off-site compensation for stream, wetland and environmental impacts that are unavoidable as a result of development projects occurring in that portion of the primary Geographic Service Area (GSA) that is located within the James River watershed as specified in the Umbrella Mitigation Bank Instrument (UMBI). The proposed Bank Site is located in the Lower Coastal Plain region of Virginia, near the City of Williamsburg. Figure 1 shows the location of the proposed site within the County.

JCC is undertaking this Bank Site as a response to stakeholder input from the Powhatan Creek Watershed Management Plan, which calls for the restoration of several stream channels within the Powhatan Creek Watershed and the overall improvement of water quality within Powhatan Creek.

**Site Description**

The site is located on the U.S.G.S. 1:24000 7.5-minute series quadrangle, Norge, Virginia, as shown in Figure 2. The site consists of approximately 30 acres of riparian forest and wetlands transected by a severely degrading stream channel and associated tributaries. The site terrain is generally flat within the floodplain of the stream channel, with an elevation change of approximately 30 feet from the beginning to the end of the project. The mitigation site includes floodplain, wetland, riparian forest, and upland forest acreages as well as linear feet of stream channel.

**Feasibility and Baseline Data**

Prior to the preparation of this Prospectus, JCC conducted a feasibility study and conceptual plan to gather baseline data and assess the potential for the Bank Site to be restored for the purpose of enhancing water quality within Powhatan Creek. The results of these investigations, data and engineering analyses support the restoration of the stream channel.

**Site Development Plan**

JCC will prepare a Site Development Plan (SDP) for the Bank Site for approval by the MBRT. If approved, the Bank Site SDP will be the first addendum to the James City



County UMBI. The SDP will include clearly defined goals and objectives, design criteria, geographic service area, credit composition, etc.

The SDP will be prepared in accordance with the Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (Volume 60, Number 228, Federal Register 11/28/95) and Section 62.1-44.15:5 (B) of the Code of Virginia, as well as discussions and agreements established during the umbrella mitigation bank review process.

### **Permits**

All necessary Clean Water Act (CWA) and/or Virginia Water Protection (VWP) permits will be obtained by JCC as part of the Bank approval process. All environmental studies required by the State or Federal Government will be undertaken and approved by the appropriate agency.

### **Maintenance, Monitoring and Success Criteria**

JCC will provide the MBRT 'as-built' drawings of the mitigation activities once construction is completed.

Prior to the advance release of credits, JCC will provide appropriate financial assurance acceptable to the MBRT in accordance with the terms of the UMBI or site-specific SDP. The financial assurance requirements will be reduced over time as the SDP is implemented. JCC will ensure all monitoring and maintenance costs will be undertaken during the success criteria time period.

JCC will provide maintenance and monitoring for a ten-year period following the completion of construction and planting. Monitoring will include data collection for the indicators of success specified for each site. Monitoring reports will be submitted to the MBRT according to the schedule set forth in the SDP and will be used to evaluate site performance relative to the performance criteria established in the SDP. Remedial actions to the Bank Site may be necessary during the operational life. If JCC has followed the SDP but performance criteria are not being met, the MBRT will assist in the development of measures to meet performance criteria while holding additional cost to a minimum.

### **Long-term Protection**

Consistent with the conditions of the UMBI, a conservation easement or declaration of restrictive covenants will be recorded prior to the sale of any credits to assure preservation of these lands in perpetuity. Copies of documents of long term protection measures will be included in the SDP. The approved and debited credits in the Bank Site will be retained in perpetuity by JCC.

Decisions concerning the operational life of the Bank Site, long-term monitoring/management, remedial actions, and financial assurances will be made in accordance with Section II.E. of the Federal Banking Guidance (November 28, 1995).

These decisions will be agreed upon in the final Bank Site SDP signed by the sponsor and the participating agencies.

### **Credit Availability and Accounting Procedures**

JCC will establish and maintain an accounting system (i.e. ledger) which documents credits and debits to the Bank Site account. Each time an approved debit/credit transaction occurs, JCC will submit a statement to the permitting agencies. JCC will also generate an annual ledger report to be submitted to all members of the MBRT. The ledger will be available for inspection upon written request by any participating agency.

Decisions concerning credit withdrawal from the Bank Site will be made in accordance with the Code of Virginia Section 33.1-223.2.1 on Wetland Banking and Sections II.D.6 and 7 of the Federal Banking Guidance (Federal Register: November 28, 1995; Vol. 60, No. 228). In addition, the following general guidelines apply to this Bank Site:

- a. Availability of credit will be based on the level of achievement of those goals and objectives contained in the site-specific SDP approved by the MBRT.
- b. Debits of available credit from the bank ledger account to compensate for the impacts of authorized projects will be based on the permit requirements for those projects. The permit requirement will normally reflect consideration of the value of the wetlands or waters impacted along with the value of the available compensation credit in the Bank Site. Standard compensation ratios consistent with those used by the permitting agencies for created wetlands and waters will be applied at the time of the application.
- c. This Bank Site can be considered as a compensation site for any project in the James River watershed portion of the primary GSA of the JCCUMB where on-site compensation is demonstrably impracticable. The Bank Site also reserves the right to service public projects under the guidelines developed by state agencies. The use of the Bank Site will be reviewed on an individual basis by the MBRT, consistent with regulatory guidelines.

### **Project Schedule**

It is anticipated that a draft site-specific SDP will be submitted to the MBRT in the first quarter of 2006.

### **Conceptual Plan**

The overall goals of the Bank Site are to:

1. restore the natural function and habitat of the degraded stream channel by creating a stable stream dimension, plan and profile;
2. enhance the water quality of Powhatan Creek by increasing the floodplain connectivity and stormwater attenuation of the stream channel restoration site and installing stable grade controls within the channel;
3. enhance stream habitat through natural woody debris and riffles along with the removal of a fish barrier.

An Individual SDP will be developed by JCC to establish the Bank. The SDP will include location maps, goals and objectives of the site, land use plans for the property, proposed geographic service area for the bank site, credit composition, site protection mechanism, banking master plan, banking phasing plans, hydrologic analysis and performance models, bank success criteria, preliminary specifications and construction methodologies for the project development.

The focus of the Bank Site will be compensation for impacts to Jurisdictional Waters and Wetlands of the United States and other environmental systems. The goals and objectives of the Bank Development Plan will be to replace functions and values of stream, wetland, riparian, and upland forested habitat ecosystems. The preservation, enhancement and creation of wetlands and forest buffers on this site will provide a positive contribution within the drainage basin and will contribute to improved water quality of the James River and Powhatan Creek Watersheds.